

REMARKS

In the Office Action mailed March 1, 2004, Claims 2-6, 8-10 and 21 are rejected under 35 U.S.C. §102(b), as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. Claims 19-28 and 32 are rejected under 35 U.S.C. §102(b), as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. Claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 6,187,982 issued to Markusch et al. Claims 12 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 4,853,054 issued to Turner et al. Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2. Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 19. The Examiner made those rejections FINAL.

Rejections under 35 U.S.C. §§102(b)/103(a) over Markusch et al. '917

Claims 2-6, 8-10 and 21 stand rejected under 35 U.S.C. §102(b), as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. Applicants respectfully disagree with the Examiner's contention regarding Markusch et al. '917

Applicants respectfully remind the Examiner that as stated in MPEP §2131, to anticipate a claim, a reference must teach every element of that. Applicants respectfully contend that the Examiner has failed to point to where Markusch et al. '917 do so.

Further, as stated in MPEP §2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed

Mo5944

-9-

invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, citing *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

Clearly there is no such teaching, suggestion or motivation shown in the reference in this case. The Examiner contends at pages 2-3, paragraph numbered 3 that Markusch '917,

...teaches the exact formula as set forth by the Applicant (*sic*).... With regard to the isocyanate formula, Applicant (*sic*) is invited to read the passage beginning in column 3, line 55, where it explicitly states that suitable polyisocyanates include monomeric diisocyanates represented by the formula $R(NCO)_2$. Markusch et al., teaches (*sic*) that R, which is the same as Applicant's (*sic*) "Q" represents a divalent aliphatic hydrocarbon group having 4-18 carbon atoms, a divalent cycloaliphatic hydrocarbon group having 7-15 carbon atoms or a divalent aromatic hydrocarbon group having 6-15 carbon atoms (Column 3, 60-Column 4, 5). In addition Markusch et al., teaches (*sic*) an isocyanate group content from 20-30% by weight, which meets the limitations of at least 10% by weight (Column 3, 35-45). Thus, the Examiner fails to see a difference between the instant claims and the prior art.

Col. 3, line 35 through col. 4, line 4 of Markusch '917 are reproduced below for the Examiner's convenience,

...methylene bis(phenylamine), and the various positional isomers of the higher ring polyamine oligomers can be controlled. Thus, the phosgenated mixture can be tailored to be enriched in the relative amounts of monomeric two ring diisocyanates compared to higher ring polyisocyanates. In this manner, it is also possible to obtain mixtures that contain a relatively high amount of the less reactive ortho-substituted two ring and higher ring polyisocyanates. Mixtures of the 4,4'-, 2,4'-, and 2,2'- methylene bis(phenylisocyanate) monomers that are enriched in the 2,4'- and 2,2'-isomer can also be separated from these phosgenated mixtures by distillation. Alternatively, mixtures of the two ring diisocyanates and higher ring polyisocyanates can be produced directly having desirable viscosity, isomer ratio, and reactivity characteristics. By higher ring polyisocyanates, it is meant three-ring or higher products derived by the phosgenation of aniline-formaldehyde condensation products. These are also commonly known as polymeric MDI, and may be referred to as derivatives of MDI.

It is possible to prepare the isocyanates of the present invention, for example, by mixing polymethylene poly(phenylisocyanate) with additional monomeric methylene bis(phenylisocyanate), followed by the addition of a mixture containing at least one low molecular weight organic compound having an average functionality of from 1.0 to 3.0, preferably 1.5 to 2.5, most preferably from 1.8 to 2.2, and being selected from the group consisting of monoalcohols, diols, and triols. Tripropylene glycol, dipropylene glycol, and mixtures thereof are preferred low molecular weight compounds to be used in the preparation of the isocyanate mixture. Alternately, one can make the isocyanate directly from a polymethylene poly(phenylisocyanate) that already contains a relatively high level of monomer (e.g., about 50 to 80%) due to its method of manufacture. In cases where the average functionality of polymeric MDI is already >2.4, it is preferred to use mixtures of monoalcohols and diols/triols to reduce the average functionality of the product.

Applicants fail to see where in this passage Markusch et al. '917 explicitly state that suitable polyisocyanates include monomeric diisocyanates represented by the formula $R(NCO)_2$. Further, Applicants fail to spot where in this passage Markusch et al. '917 teach that R, which the Examiner states is the same as Applicant's "Q", represents a divalent aliphatic hydrocarbon group having 4-18 carbon atoms, a divalent cycloaliphatic hydrocarbon group having 7-15 carbon atoms or a divalent aromatic hydrocarbon group having 6-15 carbon atoms. Finally, Applicants fail to perceive where in this passage Markusch et al. '917 teach an isocyanate group content from 20-30% by weight. Applicants respectfully request the Examiner's assistance in locating those teachings in the above-reproduced passage from Markusch et al. '917 as they are unable to do so. The teaching of Markusch et al. '917 is directed to a polyisocyanate blend or mixture as is stated therein at col. 2, lines 63-67. The instant invention is not so directed.

Therefore, Applicants respectfully request the Examiner reconsider and reverse her rejection of Claims 2-6, 8-10 and 21 under 35 U.S.C. §102(b), as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al.

Mo5944

-11-

Rejections under 35 U.S.C. §§102(b)/103(a) over Markusch et al. '917

Claims 19-28 and 32 stand rejected under 35 U.S.C. §102(b), as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. Applicants respectfully disagree with the Examiner's contention regarding Markusch et al.

Applicants' remarks above with respect to Markusch et al. '917 are equally applicable to the instant rejection. Markusch et al. '917 fails to teach or suggest the instantly claimed invention.

Therefore, Applicants respectfully request the Examiner reconsider and reverse her rejection of Claims 19-28 and 32 under 35 U.S.C. §102(b), as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al.

Rejections under 35 U.S.C. §103(a) over Markusch et al. '917 further in view of Markusch et al. '982

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 6,187,982 issued to Markusch et al. Applicants respectfully disagree with the Examiner's contention regarding Markusch et al. '917 further in view of Markusch et al. '982.

Applicants' remarks above with respect to Markusch '917 are equally applicable to the instant rejection. Markusch et al. '917 fails to teach or suggest the instantly claimed invention. Further, the teaching of Markusch et al. '982 appears not to be combinable with Markusch et al. '917 as Markusch '917 teaches an isocyanate blend whereas '982 does not. Even if combinable, Markusch et al. '982 fails to add the missing teaching or suggestion to lead one of ordinary skill to the instantly claimed invention.

Mo5944

-12-

Therefore, Applicants contend that nothing in the combined teaching of the cited art would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse her rejection of Claim 7 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 6,187,982 issued to Markusch et al.

Rejections under 35 U.S.C. §103(a) over Markusch et al. '917 further in view of Turner et al.

Claims 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 4,853,054 issued to Turner et al. Applicants respectfully disagree with the Examiner's contention regarding the cited art.

Applicants' remarks above with respect to Markusch et al. '917 are equally applicable to the instant rejection. Markusch et al. '917 fails to teach or suggest the instantly claimed invention. Further, Turner et al. fails to add the missing teaching or suggestion to lead one of ordinary skill to the instantly claimed invention.

Therefore, Applicants contend that nothing in the teaching of the cited art would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse her rejection of Claims 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2 and further in view of U.S. Pat. No. 4,853,054 issued to Turner et al.

Rejections under 35 U.S.C. §103(a) over Markusch '917

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2. Applicants respectfully disagree with the Examiner's contention regarding Markusch et al.

Mo5944

-13-

Applicants' remarks above with respect to Markusch et al. are equally applicable to the instant rejection. Markusch et al. fails to teach or suggest the instantly claimed invention.

Therefore, Applicants contend that nothing in the teaching of Markusch et al. would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse her rejection of Claim 14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 2.

Rejections under 35 U.S.C. §103(a) over Markusch et al. '917

Claim 31 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 19. Applicants respectfully disagree with the Examiner's contention regarding Markusch et al.

Applicants' remarks above with respect to Markusch et al. are equally applicable to the instant rejection. Markusch et al. fails to teach or suggest the instantly claimed invention.

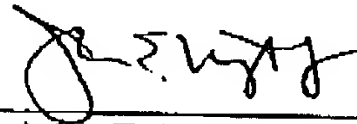
Therefore, Applicants contend that nothing in the teaching of Markusch et al. would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse her rejection of Claim 31 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,558,917 issued to Markusch et al. as applied to Claim 19.

Conclusion

Applicants have made no claim amendments as they contend the pending claims are patentable over the cited art. Accordingly, reconsideration and a Notice of Allowance are respectfully requested for Claims 2-14 and 19-32. If the Examiner is of the opinion that the instant application is in condition for other than allowance, she is invited to contact the Applicants' Attorney at the telephone number listed below, so that additional changes to the claims may be discussed.

Respectfully submitted,

By



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Mo5944

-15-